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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,108	10/19/2001	Peter Korl	32301W217	6765

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EXAMINER
WRIGHT, WILLIAM G

ART UNIT	PAPER NUMBER
1754	

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/982,108	KORL ET AL.	
	Examin r	Art Unit	
	William G. Wright SR.	1754	

-- The MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) 19-21 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-18 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-18, drawn to a process for continuous catalytic hydrogenation, classified in Class 208, subclass 142.

II. Claims 19-21, drawn to a process for the production of hydrogen peroxide, classified in Class 423, subclass 588.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions as claimed are not capable of use together. The hydrogenation of materials other than oxygen, e.g. hydrocarbons is not accomplished by a method that one would contemplate as a method for making hydrogen peroxide.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Robert G. Weilacker on June 20, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Hiles et al. '604.

The claims and specification of the applied reference teach the claimed requirement of the instant claim 1. Instant claim 1 requires that the hydrogenation process be continuous and that a reaction mixture be recirculated. The claim 1 of the reference teaches a continuous process. The claim 16 of the reference teaches the feature of recycle for vaporization in at least one of the vaporous streams, thus recirculating. The teaching of the reactants being mixed together before they are placed in the reactor is easily found in the multireactor system taught by the applied reference.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bengtsson '043 in view of Devic '853.

The primary reference Bengtsson teaches a continuous process for the production of hydrogen peroxide, using anthraquinone derivatives and bubbles of a defined size. These teachings are found in the Abstract and at column 2 line 45 et seq. and column 3 line 52 et seq. The feature of recycle is taught at claim 9.

The primary reference Bengtsson fails to teach the specific teaching of the exact gas bubble size found in the instant claims.

The supporting reference to Devic teaches the bubble diameter to be between 0.1 mm and 2.0 mm at paragraph [0009].

The references are both to the production of hydrogen peroxide with the claimed feature of bubble size. The applicants express a claimed motivation to optimize the gas flow by the use

of a specific bubble size, this bubble size is found in the supporting reference and the claimed invention is obvious from the teachings of the applied reference.

Claims 1-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Turunen '286 in view of Welp et al. '510 ~~'839~~.

The primary reference Turunen teaches a continuous process for the production of hydrogen peroxide, using anthraquinone derivatives and bubbles of a defined size. These teachings are found in the abstract and claims of the Turunen reference.

The primary reference fails to teach the specific teachings of bubble size found in the instant claims. The secondary reference to Welp teaches bubble diameter of from 0.1-15 mm at paragraph [0027] which includes the applicants' claimed range found in the instant claims. It has been held obvious to select a range within a range by optimization for the best results, In re Boesch, 205 USPQ 215 is cited. The references are both to the production of hydrogen peroxide with the claimed feature of bubble size. The applicants express a claimed motivation to optimize the gas flow by the use of a specific bubble size, this bubble size is found in the supporting reference and the claimed invention is obvious from the teachings of the applied reference.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of copending application Serial No. 09/825,853. Although the conflicting claims are not identical, they are not patentably distinct from each other because they overlap in scope of subject matter claimed.

This is a *provisional* obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William G. Wright, Sr. whose telephone number is (703) 305-7792. The

examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for the regular communications and (703) 872-9311 for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1495.

WGW

W. G. Wright, Sr.:cdc

September 2, 2003

STEVEN BOS
PRIMARY EXAMINER
GROUP 1100